

Industrial Hemp Advisory Committee Meeting

November 18, 2015

Colorado Department of Agriculture 305 Interlocken Parkway Broomfield, CO 80021 Rio Grande Conference Room – 1 p.m. to 4 p.m.

Facilitator: Duane Sinning- Assistant Director

Present:

Colorado Department of Agriculture: Mitchell Yergert, Division Director; Duane Sinning, Assistant Director; Sharon Farr,

Administrative Assistant

Attorney General's Office: David Joeris, Senior Assistant Attorney General, CDA legal counsel

Industrial Hemp Advisory Committee Members: Alfonzo Abeyta, A Quarter Circle Lazy 5 Ranch, LLC; Troy Bauder, Colorado State University (via phone); Michael Bowman, National Hemp Association (via phone); Robert Hoban, Hoban & Feola, LLC; Ben Holmes, Centennial Seeds; Ed Lehrburger, PureVision Technology; Grant Orvis, Colorado Hemp Cooperative; Chad Pfitzer, 4 Rivers Equipment; Tracy Shogren, The Hemp Store; Joel Stanley (for Graham Carlson), CW Botanicals/Stanley Brothers Social Enterprises, LLC.

Not in Attendance: David Blake, CO Attorney General Office.

Public: David Bush, Kendall Brown, Matt Brna, Veronica Carpio, Andrew Chapman, Aqua Das Ellis, Chris Farnworth, Roberta Ficken, Barbara Filippone, Adam Fontain, Peter Hermmes, Jacob Kiesel, Kelly Knutson, Tom McEniry, Rodney Monheit, Josh Rabe, Melissa Rabe, James Riaz, Yves Valenzuela-Tyson, Samantha Walsh

Mitch Yergert started the meeting at 1:02 p.m. by welcoming all attendees and guests. All in attendance then briefly introduced themselves. The meeting was turned over to Duane Sinning who presented a PowerPoint presentation.

What's New

The Advisory Committee has been expanded from 9 members to 11. Grant Orvis will represent the certified seed growers and Graham Carlson will represent the cannabinoid industry. Robert Hoban represents industrial hemp regulation and replaces Stan Garnett whose term expired in July.

Note was made that Terry Moran has been hired as the new Certified Seed Specialist for the program and will begin in early December. A Hemp Program Manager will be hired; applications are currently being reviewed.



The DEA made some unannounced visits to some registrants as well as made a visit to the CDA which was prompted by the expiration of the department's permit and application for a renewal. An unannounced inspection is part of the DEA's requirement prior to issuance of a renewal. Duane stressed the need for registrants to keep their files complete and their registrations in compliance. In the event of a DEA inspection the department can only provide information and documentation as thorough and complete as what exists in that registrant's file.

Numbers from the first year of the program were compared to the current year. In 2014 we had a total of 252 registrations which covered 1811 acres. The majority of those acres were not planted for a variety of reasons, including lack of seed, lack of cultural expertise, lack of property agreements.

As of 11/18/2015 there were 166 active registrants who held a total of 301 registrations, representing 3657 active registered acres and 570,980 active registered sq ft. There has been a shift from R&D to commercial.

Compliance Testing

Testing for the current year has included a significant portion of both indoor and outdoor crops. Year 2014 had a failure rate of 31% while 2015 has had a failure rate of 8%. A total of 2021 acres were selected for sampling. Of those, 1398 acres were actually sampled and 623 were confirmed as not planted. Out of 1398 acres, 1290 acres or 92% passed. With respect to the failed acres 78% was in two fields. Why the better numbers? Genetics are better. Problem varieties are rapidly exiting. Duane warned that there is a lot of misinformation being circulated on the web.

THC and THCA

Duane explained that earlier in the year the CDA met with the AG's office to better understand the state's position regarding THC and THCA. The committee discussed the difference between THC and THCA and the process of heat induced decarboxylation caused by GC testing versus HPLC. THCA is the biological precursor to THC.

Ben Holmes warned of inbreeding steps to create more seed. His experience showed first seed lot can test with low THC, high CBD ratio. In the offspring the THC goes up and the ratio spread narrows, eventually working to become semi-homogeneous. Making seed for the sake of seed is wrong.

Grant suggested the answer was in sequence genetics. With an understanding of genetics and the two alleles in the parents you can determine what you have before the flowering stage.

There was discussion that the market rapidly found CBD and consensus that more seed and fiber production would soon follow. Traditional rope and soap production is predicted to increase as the number of processing facilities grow. Ed suggested the focus needs to be on processing if we are really going to turn into an industry.

Joel questioned the department's stance on jurisdiction versus DEA, federal law versus state law. David Joeris commented that state law has no effect on federal law. The CDA will continue to attempt to work within the federal limitations.

Pesticide Use

There is one current investigation on the hemp side for pesticides. Rules at the federal level are changing. There is a list of what pesticides can be used on Industrial Hemp on the website. Other pesticide uses for industrial hemp may be obtained under Section 24C, special local need registrations. Rules will be published in December that will refine 24C special local need approvals. EPA has indicated a willingness to work with us and address these types of applications.

Colorado is a label state. Companies have the choice to pursue the 24C process. Currently approximately 212 pesticides are approved for industrial hemp.

Ben questioned if there is any evidence of specific pests causing significant economic impact and the answer is no. He also asked if the department has determined any geographical hot spots. Although some cultural practices, human element, high levels of salts, and triggers of altitude might affect THC levels, for the most part, there has been no indication that there is one thing triggering THC elevations.

Bob wanted to share three points with the committee. The first was that since the CDA does not regulate products, he suggested that the FDA and FTC regulate products for human consumption across the board. He wondered if getting another state agency involved might be a mistake. Joel added that anyone making a food or dietary supplement needs to register with the FDA and follow good CGMP guidelines. Federal agencies are willing to work with you. Second, he suggested the CDA allow for R&D license for commercial producers who can provide market-based research. Final, point he made was about raising the 0.3% THC level. Duane explained that this is a constitutional and regulatory legislative issue. If Colorado raises the level, then it is at odds with the Farm Bill.

Duane explained our jurisdiction is 0.3 and below. By constitution above 0.3 it becomes marijuana. A registrant can be held criminally liable for growing illegal marijuana if their crop tests at above 0.3%.

Rules Under Consideration

Young Plant Production and Harvest. The issue of moving young plants from greenhouse location to outdoor growing area simply would require a harvest notification and a planting report for the new location.

Volunteer Plants. Duane explained we need to address how to account for plants that reseed themselves from a previous registration. Any volunteer plants that come up and are not registered are not covered by any of the protections afforded by the program. Allowing these plants to be included in a new registration seems like a way to handle if the property owner wishes to participate in the program. Should the owner decided not to participate in the program, there would be no program protection unless plants were tilled under or otherwise destroyed.

Changes to Harvest Date. Department understands the requirement to provide a harvest date can be unrealistic and impractical in an agronomic program. Yet CDA needs a reasonable means to establish harvest date for testing purposes. CDA will need to determine more efficient method to track changes in harvest dates. To preserve integrity of the program registrants should not be allowed to provide early harvest date in order to avoid testing at peak THC levels.

Tools Not Rules

CDA is committed to looking for ways to manage the program effectively without needing to implement unnecessary rules.

MED lab access and RFID system

Duane noted that tests will not be used for compliance. A parallel system designed by Franwell will be put into place similar to MED. Registrants will contact Franwell directly. Tags issued with will be a different color for hemp samples than those used for marijuana. CDA will not be involved other than helping to facilitate. Basic training will be provided by Franwell instructing on how to collect sample, specimen bagging and transport, etc. RFID tag will be required to accompany specimen but no manifest for transport will be needed. RFID tag will be put directly on the sample, not on the plant. RFID tag will not have to follow the plant throughout the entire system. Testing will not be limited to THC. Full

cannabinoid profile will be available. There will be no compliance authority from said testing. MED will not have access to results.

Early Termination of a Registration

Rule is needed to preempt early termination of a registration. There is concern when law enforcement calls to confirm a registration that is later cancelled. There is concerned about the implications of such a situation and that the integrity of the program could be diminished by such a situation. There are also concerns in land owner/registrant conflicts and contract disputes. There needs to be an exit strategy. There can still be testing at the Department's discretion prior to termination. We do not want early termination to be a method of providing cover. If you are selected for testing you cannot terminate without potential compliance testing.

Routine Inspections/DNP Plants Inspections.

Routine inspections will become more important as we move into the certified seed program. For did not plant (DNP) registrants, the Department needs the authority to conduct routine inspection and verify the DNP status.

Certified Seed Program

CDA approved certified industrial hemp seed is a variety that has proven to produce mature industrial hemp plants with a THC level below 0.3% in a broad variety of test plots across Colorado's broad climatic conditions. Ninety percent of the standards are the same as if producing any other kind of crop.

Steps in Certification Process:

- Application and eligibility documentation.
- THC testing for variety approval.
- Certified seed production from registered foundation seed.
- Labeling requirements.

Eligibility requirements.

- Name of variety.
- Statement concerning variety origin and breeding procedure used to develop it.
- Detailed description of morphological, physiological and characteristics of plants and/or seed that distinguish it from other varieties.
- Evidence supporting the identity of the variety such as comparative yield date, insect and disease resistance, or other factors.
- Statement delineating the geographical area or areas of adaptation.
- Plans and procedures for the maintenance of the seed classes, including number of generations through which variety may be multiplied.
- Description of the manner in which variety is constituted when a particular cycle or multiplication is required.
- Any restrictions on the variety, specified by the breeder with respect to geographic area of seed production, age
 of stands, or other factors affecting genetic purity.
- Sample of seed representative of the variety as it is marketed.

Land Requirements:

- May not be planted where volunteer growth from previous may cause contamination.
- Fields for foundation or registered classes of seed may not be planted on land which in the previous five years grew a crop of industrial hemp.
- Crops of certified seed must not be grown on land which in the preceding three years produced a crop of industrial hemp.

 Fields must be reasonably free of weeds. Presence of state listed noxious weeds may be cause for declining certified status.

THC Testing Requirements: CDA will conduct THC tests in different geographic regions of the state to verify variety entered in the program will produce mature plants with a THC level of below 0.3% THC. ONLY varieties approved by the CDA may be sold as Certified Industrial Hemp Seed in Colorado. Compliance testing done on fields that have been planted with CDA approved certified seed will be at the CDA's expense. There would be no cost to registrants unless there was a significant noncompliance issue.

Certified Seed Production: The CDA will work with CSU using AOSCA standards as a guideline for certified seed production, including land requirements, field standards, and seed standards. Field standards include crop inspection, isolation, and impurity standards. Varieties will be certified, not breeders. Seed standards will include purity, inert matter, weed seed, and germination. Beginning in January CSU will begin testing seed samples for impurities.

Funding: Long-term funding for the program will need to be addressed. CDA was granted some legislative funds to get the certified seed program up and running; however, a long term solution to make the program self- sufficient will be necessary.

The meeting ended with some questions from the general public.

Mitch explained the timeline for the rules. Rules will be submitted by early December in draft form and published the 25th of December. Rules hearing will be in January and rule changes will be effective in March.

All attendees were informed of the "Year in Review" meeting which is scheduled for Wednesday, December 16th at the CDA. An agenda and details will be available later and posted on the website.

With no further discussion the meeting concluded at 4:07 p.m.